SECURITY CLASSIFICATION OF THIS PAGE

# REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

AD-A203 416

1b. RESTRICTIVE MARKINGS: DTIC FILE COPY (2)

3. DISTRIBUTION/AVAILABILITY OF REPORT
Approved for public release; Distribution unlimited

4. PERFORMING ORGANIZATION REPORT NUMBER(S)
43-88

5. MONITORING ORGANIZATION REPORT NUMBER(S)

6a. NAME OF PERFORMING ORGANIZATION
US Army-Baylor University Graduate Program in Health Care Admin/HSHA-IHC

6b. OFFICE SYMBOL (If applicable)

7a. NAME OF MONITORING ORGANIZATION

6c. ADDRESS (City, State, and ZIP Code)
FT Sam Houston, TX 78234-6100

7b. ADDRESS (City, State, and ZIP Code)

8a. NAME OF FUNDING/SPONSORING ORGANIZATION

8b. OFFICE SYMBOL (If applicable)

9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER

8c. ADDRESS (City, State, and ZIP Code)

10. SOURCE OF FUNDING NUMBERS

| PROGRAM ELEMENT NO. | PROJECT NO. | TASK NO. | WORK UNIT ACCESSION NO. |
|---|---|---|---|
| | | | |

11. TITLE (Include Security Classification)
A Study of the Staffing Requirements for the Replacement Hospital, National Naval Medical Center, Bethesda, Maryland

12. PERSONAL AUTHOR(S)
Lieutenant David R. Gervais

| 13a. TYPE OF REPORT | 13b. TIME COVERED | 14. DATE OF REPORT (Year, Month, Day) | 15. PAGE COUNT |
|---|---|---|---|
| Study | FROM JUL 79 TO AUG 80 | AUG 80 | 76 |

16. SUPPLEMENTARY NOTATION

| 17. COSATI CODES | | |
|---|---|---|
| FIELD | GROUP | SUB-GROUP |
| | | |
| | | |

18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
Replacement Hospital; Automated Health Care Systems, Staffing Requirements/Methodologies

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

As a result of a scheduled replacement hospital, this study was conducted to reveal that regardless of increased facility efficiency design, current manpower requirements were inadequate. A justification to increase staffing requirements was developed, but met with frequent resistence and as a result of an unusually late submission, was not well received. This study presented and examined alternatives and viable recommendations.

(KR/KT)

DTIC ELECTE S D

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT
☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS

21. ABSTRACT SECURITY CLASSIFICATION

22a. NAME OF RESPONSIBLE INDIVIDUAL
Lawrence M. Leahy, MAJ(P), MS

22b. TELEPHONE (Include Area Code)
(512) 221-6345/2324

22c. OFFICE SYMBOL
HSHA-IHC

DD Form 1473, JUN 86 Previous editions are obsolete. SECURITY CLASSIFICATION OF THIS PAGE

# A STUDY OF THE STAFFING REQUIREMENTS FOR THE REPLACEMENT HOSPITAL, NATIONAL NAVAL MEDICAL CENTER, BETHESDA, MARYLAND

A Problem Solving Project

Submitted to the Faculty of

Baylor University

In Partial Fulfillment of the

Requirements for the Degree

of

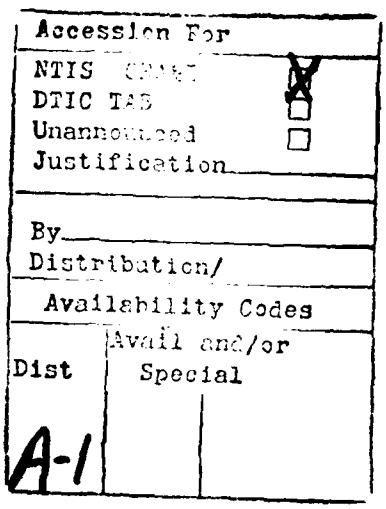
Master of Hospital Administration

by

Lieutenant David R. Gervais, MSC, USN

August, 1980

The opinions or assertions contained in this problem-solving project are the private ones of the author and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.





David R. Gervais
Lieutenant, Medical Service Corps
United States Navy

ACKNOWLEDGEMENTS

This author wishes to acknowledge the many individuals whose assistance made the completion of this problem-solving project possible. I wish to express my thanks to the chiefs of service for their assistance and cooperation in the preparation of the staffing documentation.

Gratitude is also extended to CAPT L. G. Dickson, MC, USN, and LT M. M. McCarthy, MSC, USNR, for their assistance, suggestions, and guidance during the study.

I am deeply indebted to my preceptor, CDR Robert K. Zentmyer, MSC, USN, Director of Administrative Services, National Naval Medical Center, Bethesda, Maryland, whose encouragement, assistance, and critical comments have been crucial in the development and completion of this project. His guidance was instrumental in turning an academic endeavor into a beneficial learning experience. For this, I will always be grateful.

I would like to express a special thanks to Ms. Jill Mizrahi whose patience, suggestions, and contributions, while typing this project, significantly added to its successful completion.

TABLE OF CONTENTS

# I. INTRODUCTION

In June 1980, a replacement hospital for the National Naval Medical Center, Bethesda, Maryland is scheduled for completion at an estimated cost of over $100 million for construction and equipment. Present plans have established October 1980 as the month in which the new facility will commence the provision of health care services. The replacement hospital is one of the most modern federal health care facilities constructed to date. The design has considered the problems encountered in other facilities and has incorporated the latest state-of-the-art concepts and technology in the delivery of health care. Some of the new systems are:

1. An Automated Central Materials Management and Delivery System
2. An Automated Food Management Re-thermalization System
3. A Computer-Assisted Nurse Call Communications System
4. An Automated Environmental/Security Control System
5. A Comprehensive Hospital Information System
6. A Physiological Monitoring System
7. A Patient Data Management System
8. A Closed Pneumatic Tube System

The physical design of the new facility has separated the inpatient and outpatient functions into two separate but interconnected buildings. The outpatient building has centralized all outpatient clinics by incorporating a mall concept which includes the use of escalators as well as elevators. The top floor includes the main operating room, labor and delivery rooms, special care units and special studies facilities. The inpatient facility design has

eliminated the open-ward concept and provides one, two, and four bed patient units. Most administrative services are located on the first two floors of the seven floor inpatient facility. Several of the administrative services, the psychiatric clinics and inpatient wards, and two of the outpatient clinics will remain in the current facility and will receive remodeled spaces during an ensuing retrofit project.

## Development of the Problem

The issue surrounding this project involves the staffing for the replacement facility. In 1974, Congressional Committee hearings were held concerning the need for a replacement facility with special concern directed at the staff required to operate the facility. Testimony, provided by the Navy Surgeon General at that time, indicated that the efficiency of design and special systems incorporated into the replacement facility would preclude the need for additional staffing. The new facility would be designed in such a manner as to provide for the more efficient and effective use of available personnel and material resources.

During the ensuing years, the construction project and attendent systems progressed through the developmental stages and began to materialize into a finished project. As the project neared completion, it became increasingly apparent to management that the current authorized and on board manpower resources were insufficient to provide the level of health care services that the new facility would be capable of delivering. Furthermore, staffing cutbacks and changes in patient care techniques have complicated overall personnel requirements and have called the original staffing estimates into question.

## The Problem

The problem was "to determine the optimum staffing requirements, less

Nursing Service, for the replacement hospital facility." The Nursing Service was specifically excluded because an independent study was being conducted by this Service. The end product for this problem-solving project was to be a staffing document identifying the needs for the replacement facility. This document would serve as the source justification for a request to higher authority for additional staffing requirements.

The Limitations

The major limitations placed upon this project refer to total manpower resources. The Navy Department is limited, by United States Code, as to the number of personnel who may be on active duty. This limitation governs the total strength of the Navy Medical Department in terms of the number of health care personnel who may be on active duty. Furthermore, civil service ceiling points for facilities located within the National Capitol Metropolitan Area are further limited. These limitations are further complicated by an existing manpower resource shortage and the fact that the Bureau of Medicine and Surgery only controls approximately 55 percent of the total health care personnel resources in the U.S. Navy. Therefore, the final problem-solving options must be limited to a well justified and realistic recommendation which is consistent with these manpower constraints.

Obstacles to Research

There are several obstacles that limit the optimal research of this problem. The major obstacle is the lack of a comprehensive and realistic manpower planning system which has resulted in piecemeal approaches to staffing and manpower authorization documents that do not accurately reflect the organization's resources. Another obstacle refers to time which, generally, is a factor which should not be considered. However, the new facility is

scheduled to begin providing health care services in October 1980. Optimum research for a problem of this magnitude should begin with the initial construction and be revised as the facility develops towards completion. Staffing requirements, identified during this period, should be promulgated to high authority at such intervals as to provide for meaningful manpower planning and sufficient time to meet these requirements. However, the failure to follow this approach resulted in a late attempt to produce a document upon which the staffing needs may be requested.

Other Factors

Other factors have influenced the research methodology and will impact upon the final recommendation of this project. These factors include:

1. Corporate memory. The development of adequate staffing needs involves the review of historical manpower levels and workload statistics. The transient nature of military personnel and the lack of a specifically identified manpower specialty precludes continuity within the system and perpetuates a restructuring of the record keeping system with each new resource manager. The system is such that it makes it impossible to accurately identify historical on board personnel strengths for individual services. Furthermore, while historical workload statistics for the facility as a whole are available, individual services' workload statistics are not. This factor is further complicated by the inconsistent methodology used by transient personnel to identify these workload statistics which lowers their validity.

2. Teaching mission. The teaching mission for the National Naval Medical Center has grown over the years. Individually, each major Service has increased its authorized number of residents and fellows. These increases result from additional staff physician increases above authorized

strength and new programs associated with these staff physician increases. They are made with the approval of the Liaison Committee for Graduate Medical Education. The major factor affecting the teaching mission has been the establishment of the Uniformed Services University for the Health Sciences at Bethesda which requires the provision of medical education to a growing number of medical students.

3. Systems planning. To date, some of the new systems for the replacement facility have not been fully developed. During the period of the study, decisions regarding the assignment of specific space to some services, the purchase of medical equipment and systems, and the extent of services to be provided had not been finalized.

4. Retrofit project. The occupancy of the replacement facility will not involve all of the administrative and clinical services. Services such as Ophthalmology, Psychiatry (including the psychiatric inpatient wards), Manpower Management, Social Work, and Civilian Personnel, will remain in the current facility. These services will receive new spaces during a retrofit project to be commenced following occupancy of the replacement facility.

## Literature Review

A literature review was conducted with the intended purpose of identifying related problems within the health care community, determining the techniques used to solve the problem, and ascertaining the applicability of these techniques towards the provision of an acceptable solution for this problem-solving project.

The literature revealed a wide variety of articles relating to staffing determinations in the civilian health care community; however, the majority of these articles were either related to Nursing Service or were clinic/

specialty area specific. The latter dealt with such issues as how to staff an operating room,[1] a family practice clinic,[2] and an ambulatory care setting.[3] These authors all applied various forms of the linear production function statistically fitted to workload data associated with these areas in order to determine the numbers of different combinations of physicians, nurses, and paraprofessionals required to serve the case load. All of these methods used quantitative formulae to address the staffing needs of the particular area of concern. One author pointed out that many hospitals base their staffing decisions on department heads' predictions of the workloads in their departments.[4] This approach is valid, but should not be the sole basis for staffing determinations. The input may be clouded by arbitrary or political considerations as well as subjectivity due to the proximity of the department head to the staffing problem. The use of engineering standards supports the projected estimates and validates the staffing needs based upon quantifiable data.

A review of the staffing methodologies used by the various uniformed services revealed similar approaches. The Department of the Air Force manpower determination process[5] involves headquarters and field level management engineering teams and uses engineered and statistical manpower standards to produce staffing requirements at the functional, field activity and major claimant levels. The system employs on-site work measurement, detailed interviews, and statistical analysis of historical workload to develop engineered and statistical manpower standards. These standards are used by management engineering personnel to determine manpower needs and are used by the Department of the Air Force for manpower planning.

The U.S. Army Medical Department uses a similar method in identifying

staffing requirements.[6] The standards are published in Department of the Army pamphlet 570-557 and are provided to each medical activity. The process involves the comparison of workload performance criteria against established staffing level standards which produces the necessary staffing levels for various levels of output. The process is based on the reported workload to the headquarters level and staffing requirements are adjusted accordingly.

Within the Navy Medical Department, manpower planning takes place primarily at the headquarters - Bureau of Medicine and Surgery level. The major concern, as it relates to staffing, is the determination of physician requirements.[7] The view is that the demand for service is placed upon the system, but the entry point invariably falls upon the physician. Therefore, he is viewed as the originator and the base for health care delivery. The staffing approach developed from this concept relates to historical data such as workload, eligible population, and on board physician strengths. The method attempts to estimate physician requirements from projected workload based on the analysis of historical workload.

To date, the Navy Medical Department does not have an established, quantifiable method, in terms of engineering standards, upon which to base its overall manpower requirements. There are two programs currently under study to improve manpower planning methods. One study is the Staffing Target Project (STAFFTAR),[8] begun in 1974, and is an attempt to develop a standard for determining the number of physicians (by specialty) needed by a facility. The methodology involves determining the tasks performed by a physician, the assignment of time-values to each task using the delphi technique, and validating the standards with data such as historical workload, current workload, civilian standards, and field testing. The standards developed would be used

by a facility as guidelines in determining physician requirements. However, the final decision as to how many and what specialty types of physicians, as well as other manpower requirements, would be the decision of the manager based upon informed judgement and past experience.

The other study, a new management engineering approach, is currently in use by the Navy's Operational forces, and is being tested within the Medical Department. The system, known as the Shore Requirements, Standards, and Manpower Planning System (SHORSTAMPS),[9] utilizes very similar industrial and management engineering methods to those used by the Air Force's Management Engineering Agency. The methodology is modified to meet the peculiarities of the Navy Medical Department and is still under study.

The literature review has revealed a variety of methods which are used to determine staffing requirements. The complexity of the health care environment and the uniqueness of each facility precludes the identification of a single technique which would be applicable to solving this particular problem. However, the variety of techniques presented provides the base for the development of a research methodology applicable to this particular problem-solving project.

## Problem-Solving Methodology

The development of a solution for the problem was based upon the hypothesis that the current authorized and on board manpower levels are inadequate to staff the new replacement hospital and to provide an acceptable level of health care services to meet the expected demand. In order to either prove or disprove this hypothesis and ultimately solve the problem, the development of a research methodology identified the following study objectives:

1. To develop a zerobase for staffing requirements

2. To identify the factors which control the workload for each service

3. To establish the health care needs which are not being met by the current staffing levels and facility

4. To identify the factors which contribute to this unmet need

5. To identify those factors of the replacement facility which will have an effect on staffing and the ability to provide health care

These study objectives provide for a logical, progressive methodology and will lead towards a solution to the problem. The research methodology follows four steps: 1) the gathering of the data; 2) the evaluation of the data; 3) the development and analysis of alternatives; and 4) the recommended solution.

Standards

The validation of the stated hypothesis and the development of a sound solution must be based upon a set of standards. The standards for this study are:

1. The identification of staffing requirements will involve only those services/departments which will move to the replacement facility or will experience an impact as a result of the replacement facility.

2. The solution will be supported by nationally recognized, professional standards when available.

3. In the absence of recognized standards the professional opinion of the respective chief of service will be accepted as valid.

4. The staffing requirements identified will be limited to factors generated by the replacement facility.

Assumptions

With any problem, there are certain assumptions which must be made in order to minimize the number of variables which can impact on the study and affect the final solution. The assumptions made with regard to this study are:

1. That the operating environment of the Navy Medical Department is

sufficiently different as to make it impossible to directly compare it against another federal agency's system or civilian institution

2. That the various chiefs of service are knowledgeable concerning the staffing needs of their departments

3. That the opinions of the chiefs of service are well founded, based upon professional knowledge and judgement, and are free of personal bias

4. That the workload data reported for the various clinical and administrative services is valid

5. That the methods used to develop and collect this workload are valid

6. That the staffing requirements identified will be within the manpower capabilities of the Bureau of Medicine and Surgery

## Footnotes

[1]William Richel and Louis Sajdn, "Performance Factor Developed As Surgical Suite Management Tool," Hospitals 51, No. 6 (March 16, 1977): 146-52.

[2]Charles R. Dean, "Staffing Patterns and Clinic Efficiency," Family Planning Perspective 2, No. 4 (October, 1970): 35-40.

[3]Bruce D. Mourdorf, "Allocation of Resources for Ambulatory Care - A Staffing Model for Outpatient Clinics," Public Health Reports 90, No. 5 (September-October, 1975): 400-1.

[4]James E. Small, "Monitoring Staffing and Productivity," Hospital Progress 56, No. 2 (February, 1975): 66-7.

[5]"Air Force Manpower Determination Process; An Explanation of the System," a paper provided by Captain Darryl Eichoff, MSC, USAF, Office of the Surgeon General, Bowling Air Force Base, Washington, D. C., pp. 1-17.

[6]Staffing Guide for U.S. Army Medical Department Activities, Department of the Army Pamphlet 570-557 (June, 1974), pp. 1-6.

[7]Bureau of Medicine and Surgery, "Determination of Manpower Requirements and Manpower Planning," briefing presented to the Navy Inspector General, Washington, D. C., 25 February 1975. (Mimeographed.)

[8]Ibid.

[9]Preparation of SHORSTAMPS Staffing Standards and Staffing Guides, Chief of Naval Operations Instruction 5310.4 (March 2, 1979), pp. I-1 through I-15.

## II. DISCUSSION

Staffing studies are projects which invariably are either repeats or continuations of previous studies and this problem-solving project is no exception. In November 1978, an Ad Hoc Committee was appointed to study the staffing requirements for the replacement hospital. The committee's methodology involved interviewing each chief of service regarding his staffing needs, evaluating these needs based upon the professional knowledge and judgement of the committee members, and formulating these needs into a final staffing document which ultimately identified over forty services, departments, and branches. The final document was presented to the Commanding Officer in August 1979 and was subsequently disapproved. It was felt that the document failed to provide a quantitatively supported justification of the staffing needs and would, therefore, not be favorably considered by higher authority. It was this opinion that provided the impetus for this probelm-solving project.

### Data Collection

The development of a final solution for this study required the establishment of a starting point which involved several simultaneous steps. The area of study identified twenty-six clinical and administrative services, departments, and branches for inclusion in the project. The determination of staffing needs required that a point of reference be established and was initially identified as the 1973-74 staffing levels. However, comparison of the manpower authorization documents for those years against current authori-

zations revealed that manpower resources, on the whole, had increased over the years. It was determined that current authorized and on board manpower strengths would be used as the zerobase in as much as the situation involves the present, not the past.

Before each chief of service could be contacted, the current authorized and on board strengths for the twenty-six clinical and administrative services and departments had to be identified. The previous study had developed these numbers and they were initially considered for use. However, a random comparison of these numbers against the current manpower authorization and on board strength listings maintained by the Manpower Management Service and Civilian Personnel Service revealed that the data was not current. Furthermore, it was found that these respective strength levels fluctuated from day to day, week to week, due to previous manpower changes receiving approval from the Bureau of Medicine and Surgery, the transfer and receipt of personnel, and the movement of personnel among the various services and departments. Therefore, in order to develop a zerobase, and hence, a starting point, a specific point in time was chosen - 31 December, 1979. Using this date as a stable point of reference, the zerobase staffing levels were developed utilizing the Civilian and Military Personnel Strength Reports (Appendix A) which are provided to the Commanding Officer on a monthly basis and were accepted as valid.

After establishing a zerobase starting point, the staffing needs for each chief of service were addressed. This was accomplished by forwarding a letter (Appendix B) to each chief of service representing the twenty-six clinical and administrative services and departments. The purpose of this letter was two-fold. First, it forwarded the initial staffing requirements identified by each chief of service to the Ad Hoc Committee on the assumption that

these requirements were still valid. Secondly, it established the method by which these requirements would be quantified, and ultimately, justified. The letter directed the attention of the recipient to four specific questions in relation to staffing requirements:

1. What are the critical factors which determine the current workload?
2. What are the quantitative factors which are used to support/justify current staffing levels?
3. What are the services which should be, but are not provided and the factors which control this situation?
4. What factors associated with the replacement hospital will impact on the Service's ability to provide health care?

It was the express purpose of this letter to direct the attention of each chief of service towards developing a justification for their staffing requirements. The actual development of quantitative formulae, as pointed out in the standards and objectives of this study, was left up to each chief of service. A personal interview with each chief of service was conducted subsequent to the receipt of the letter. The interview process involved a discussion of the points set forth in the basic letter, the methods which would be used to quantify their requirements, and the format in which they should respond. Assistance was provided in identifying and utilizing recognized staffing formulae. In the absence of any established staffing formula, assistance was provided the chief of service in developing his professional judgement into quantifiable methodology. The response by each chief of service, addressing the points in the letter, would serve as the supporting data for the development of a staffing document.

## Data Evaluation

The data gathering and subsequent evaluation phases proved to be a diffi-

cult task hampered by a number of unforseen variables. These variables included frustration with the system, interdepartmental politics, a lack of communications, and a failure on the part of this researcher to establish a required response date.

Initially, interviews with some of the chiefs of service revealed a reluctance to deal with this researcher concerning staffing needs. Discussions disclosed that this project, as well as the previous study, were but two of the many requests for staffing justifications which had been placed on them over the past several years. These previous requests had been answered with little, if any, change in their authorized allowances. Therefore, they viewed this current request as another administrative burden placed upon them by an inept bureaucratic system with little in the way of expected results.

Another factor involved the political maneuvering with regard to money, spaces, and equipment associated with the new facility. This issue was further complicated by delays in policy and decision making on the part of management. During the data gathering and evaluation phases, decisions associated with the assignment of spaces and the purchase of new equipment had not been finalized. Therefore, many of the Services could not completely identify the replacement facility factors which would affect them because they were still involved with the politics of competing for space and money. In many instances, the development of equipment requests and justifications, which were used to support their needs against scarce financial resources, took precedence over responding to the staffing request. This action was the result, in part, of the belief that the realization of needed equipment, new systems, and added space was more probable than additional staffing.

One factor that is common to a facility of this size and complexity is

a lack of communications at all levels of the organizational hierarchy. The significance of this factor became apparent during the interviews and subsequent assistance sessions and is illustrated with the following examples involving the Central Materials Management (CMMS), Urology, and Radiology Services. The CMMS is a new concept for this facility as well as the Navy Medical Department. The development of staffing requirements for this service requires close coordination and communications with the services/departments it will support in order to determine exact staffing needs and preclude duplications. However, the interviewing technique revealed that no contact had been made by the Head of the CMMS with the various Services. The staffing needs for the CMMS had been developed unilaterally and the other Services had included the supply function in their own staffing needs. Several of the Services did not understand the CMMS concept and were very resistant to the idea. Hence, the concept will meet with difficulty and the staffing requirements inevitably will include duplicated effort.

A similar issue involved the Urology and Radiology Services in regard to the development of Radiology Technician staffing requirements. The Urology Service planned for six additional Urology Technicians to operate new Automated Programmed Radiography Units to be included in the new Urology Clinic. However, the staffing study developed by the Radiology Service had also programmed the need for six Radiology Technicians to operate these machines in the Urology Service. Both services were planning for the same need; yet, neither had coordinated nor communicated their planning efforts with the other, and the end result was a duplication of needs.

The final factor which complicated this study was the lack of an established response time. This researcher failed to establish a firm deadline,

supported by the Commanding Officer. Therefore, the result was repeated contacts with many services which delayed the development of a final staffing recommendation and necessitated the evaluation of data gathered by verbal means.

The evaluation of this data involved the preparation of rough numerical charts graphically identifying the authorized, on board, and requested staffing levels for officer, enlisted, and civil service personnel for each of the twenty-six clinical and administrative services. These charts were reviewed by the Director of Administrative Services during periodic meetings which were held to discuss problems encountered and progress of the project.

By early February, sufficient data had been gathered to permit the development of a preliminary chart of the total staffing requirements for the replacement hospital which was presented to the Director of Administrative Services at a progress meeting. The data revealed that the additional staffing requirements would be 1145 billets; an increase of 62 percent above the current authorized allowance for the entire facility. These results prompted a meeting with the Commanding Officer which included the Directors of Clinical and Administrative Services, the Master Chief Petty Officer of the Command, and this researcher. These additional staffing requirements were evaluated and subsequently reduced by the group. The modification to identified needs considered such factors as the realistic availability of enlisted technical personnel, the constraints placed upon civil service ceilings, and the ability of the Bureau of Medicine and Surgery to meet these needs in view of current manpower shortages.

Following this meeting, a revision of the data was prepared and submitted to the Commanding Officer for consideration (Appendix C). The revisions

reduced the total staffing requirements to 913 additional billets; a 49 percent increase above current authorized strengths.

The final staffing figures included Nursing Service requirements even though their requirements were not to be included in this project. These figures were included in order to provide a total picture of the total staffing requirements for the replacement facility and were removed prior to development of the final staffing document.

## Staffing Alternatives

The design of the replacement hospital provides a basic replacement chassis constructed around the latest state-of-the-art concepts and technology in the delivery of complex health care services. However, with the advances in biomedical science and medical technology, a need for additional technical and support personnel becomes necessary. The additional staffing requirements identified during the evaluation phase are considered the optimum staffing levels required to operate the facility as originally designed. However, the following alternatives (see Appendix D) are presented and should be considered in the development of the final staffing requirements.

### Alternative A

This alternative proposes total staffing of the "Critical Services" and the realignment of currently authorized billets to reflect the on board strength for the remaining Services. The label "critical service" is applied to those services/departments who will experience the greatest impact with the move to the replacement hospital in terms of either expansion of current services, the implementation of new missions, or both. These critical services/departments are identified as follows:

1. Central Materials Management Service

2. Food Management Service
3. Operating Management Service - Security Department
4. Patient Affairs Service
5. General Surgery Service
6. Laboratory Medicine Service
7. Orthopedics Service
8. Pharmacy Service
9. Radiology Service

The criteria used to identify these services/departments as critical involves the following:

1. A total central materials management concept.
2. A food management and delivery system which relieves Nursing Service personnel of food delivery and dietary responsibilities.
3. The addition of a JCAH required Utilization Review Program.
4. The improvement of the Inpatient Word Processing and Admission Systems to reduce current backlogs and inefficiencies.
5. The expansion of the security needs and responsibilities associated with the replacement facility.
6. An increase in main operating room suites, special care facilities, and outpatient clinical areas.
7. The elimination of the open ward concept.
8. The drastic reduction in supply storage spaces in all areas of the hospital necessitating an exchange cart system for medical supplies and linen.
9. An increase of almost 100 percent in the Radiology Service's spaces, equipment and capability.
10. The steady expansion of Laboratory Medicine services and response billets which will soon surpass the Service's capabilities.

The additional staffing requirements associated with this alternative represents 408 billets and reflects the staff required to meet the additional

responsibilities placed upon all the Services. Acceptance of this alternative will allow the Center to meet the expected workload without severely affecting the delivery of health care services. It would also allow for the development of a realistic and current manpower authorization which would be in keeping with current output performance levels. The failure to staff the "Critical Services" and realign the current on board billet structure of the remaining services will reduce the productive capacity of each Service and result in a "ripple effect" which will ultimately result in the overall reduction in health care delivery services. This effect will be felt most by those Services who receive support from the critical services.

Alternative B

This alternative proposes staffing only those Services identified as "critical" in Alternative A and would result in an additional staffing requirement of 322 billets. This alternative provides a reduction of eighty-six billets over the previous proposal; yet would still require the same amount of personnel. Considering the current manpower shortage and the adverse effects that any large staffing request would place on the Navy Medical Department, this alternative would meet the short term needs of the Medical Center and produce the minimum adverse effects on the delivery of health care services. However, this proposal is only a short term solution to a long term problem which will eventually have to be addressed. Furthermore, leaving the services with a disparity between authorized allowance and on board strength, the latter being in excess for physicians, would seem to leave management open to criticism.

Alternative C

This alternative proposes the realignment of the authorized allowances

to reflect on board strength and the staffing of those authorized billets which remain unfilled. Acceptance of this alternative would result in 114 additional billets. The only services which would benefit by this proposal would be Pharmacy, Laboratory Medicine, and to some extent, Radiology. However, this proposal would only bring the Services up to current on board strength and allowance, and would not address their staffing needs in relation to the replacement hospital. Furthermore, this alternative fails to address the staffing needs of the critical services and completely ignores the Central Materials Management Service which will be assuming an entirely new and expanded role within the new facility.

Alternative D

This alternative addresses staffing only the Central Materials Management Service (CMMS) which would involve an additional 102 billets. In view of the lack of supply storage space within the new facility and the resultant dependence upon this Service, the importance of staffing the CMMS cannot be overstressed. The Main Operating Suite, Delivery Room, Special Care Units, and all inpatient nursing units must receive their support from the CMMS. The remainder of the outpatient facilities and other support services are designed with this concept in mind; hence, less than full CMMS support will require assumption of supply responsibilities by health care delivery personnel, impairing their ability to provide health care services. The dependence of the facility as a whole upon the efficient and effective operation of the CMMS makes it imperative that this Service receive the necessary staffing regardless of which alternative is chosen. Less than full staffing will necessitate the reassignment of health care personnel from other services to the CMMS in order to perform the services which must be delivered.

Alternative E

This alternative addresses occupancy of the new replacement facility and the delivery of health care services with the current authorized and on board staffing levels. Should the command be forced to accept this alternative, the ability of the Medical Center to deliver high quality health care will be severely affected. The impact of selecting this alternative will result in a "ripple effect" throughout the entire facility reducing the overall ability to produce quality health care services. The potential negative impact of this alternative, as is delineated in appendix E, includes: The operation of radiology services at 50 percent capacity; elimination of satellite pharmacy services to the Special Care Units; operation of the Main Operating Suite at 50 percent capacity; resorting to contract security services for the replacement hospital; increased contract services in response to the increased Patient Affairs workload; reduced Laboratory services in reaction to the increase in "stat" requests; and the potential jeopardy of continued accreditation of many of the residency programs.

The most significant impact would be on the Central Materials Management Service. The Central Materials Management Service would be forced to commence operations in the replacement facility without additional staff which would necessitate the reassignment of selected technical and non-technical health care personnel from other essential services so that minimum levels of Central Materials Management Service operations could take place. The end result would be the inevitable reduction in the quality and quantity of health care delivered by the replacement facility.

## III. CONCLUSIONS AND RECOMMENDATIONS

The issue which prompted this problem-solving project was the construction and impending occupancy of a replacement hospital for the National Naval Medical Center, Bethesda, Maryland. The approval for construction of this project was based upon the opinion that the inclusion of advanced state-of-the-art concepts and technology in the new facility's design would preclude the need for additional staffing requirements. However, as the facility has neared completion, the need for additional staffing has become apparent. Therefore, the problem was to determine the optimum staffing requirements, less Nursing Service, for the replacement facility. The problem proposes the hypothesis that the current staffing levels are inadequate and requires that the final objective, should this hypothesis prove to be true, be the development of a staffing document which accurately reflects the staffing requirements for the replacement hospital.

The study was conducted by initially determining the current authorized and on board staffing levels which provided a zerobase starting point. The staffing data was gathered by assisting the various chiefs of service in developing their staffing requirements and adequately justifying their needs through the use of a quantitative method whenever possible. The staffing requirements data developed by each of the twenty-six clinical and administrative services/departments included in the project, were evaluated by command decision and used to prepare alternative proposals for staffing the replacement hospital.

The initial hypothesis for this project was that the current authorized

and on board staffing are inadequate to staff the new facility and meet the expected demand for health care services. It must be concluded that this hypothesis is true and is supported[1] by the objective and subjective justifications submitted by each of the chiefs of service. These justifications, save a few, are quantified according to the standards developed for this project and provide a sound base for requesting additional staffing requirements for the replacement hospital.

From this conclusion, a solution to the overall problem and fulfillment of the major objective of this project is hereby proposed. The proposal is that the command submit a staffing request which is provided as appendix F, identifying the total optimum and minimum staffing requirements along with an alternative which addresses the staffing of the "Critical Services" as identified in Alternative B. The request must include the staffing requirements for the Central Materials Management Service which is the most critical Service in terms of the new facility's ability to deliver health care.

The staffing document (Appendix F) includes the basic correspondence from the Command to the Bureau of Medicine and Surgery. This correspondence addresses the points discussed in the alternatives and provides the supporting documentation. The data gathered during the course of this project was used to prepare this supporting documentation and is arranged in four enclosures to the basic correspondence. The first enclosure provides numerical data graphically identifying the current authorized and on board, requested, and additional staffing requirements for each of the twenty-six clinical and administrative services, for the "critical" services, and is preceded by a graph identifying these needs for the facility as a whole. Enclosure (2) provides a summarized narrative for each service/department addressing the

controlling and quantitative factors of workload, the unmet need, the replacement facility factors which will impact on the Service's ability to provide health care, and the total gross needs for the Service in terms of additional billets. Enclosure (3) provides the documented justification submitted by the Services addressing their staffing requirements. And enclosure (4) is a summary of the adverse impacts which could be expected to occur if less than minimum staffing is received.

This proposal recognized the current manpower shortages being experienced throughout the Navy Medical Department as well as the Bureau of Medicine and Surgery's inability to respond to any large request for additional staffing. However, the replacement hospital should not be considered a one-for-one substitution of old for new. It is an augmented facility designed and equipped with advanced concepts and technology in health care delivery. Therefore, it is of paramount importance that the staffing requirements identified for this facility be fully addressed and be made a matter of record. In the absence of an established Navy staffing methodology which is capable of addressing the needs of a health care facility, this proposal, and the accompanying staffing document, will act as an interim record of the staffing requirements for the National Naval Medical Center Replacement Hospital, Bethesda, Maryland.

As a final recommendation, it is suggested that the procedures followed in Position Management Review, as they relate to requests for additional civil service positions, be applied to the requests for additional enlisted technical and non-technical personnel. As pointed out in the study, enlisted personnel are often reassigned among the various Services in order to meet shortages in staffing levels without the submission of adequate justification

and the appropriate action to effect a change to the Center's Manpower Authorization. This practice creates a situation whereby the authorized and on board staffing levels are not congruent, and produces a manpower authorization document which does not accurately reflect the staffing requirements of the command. Furthermore, it places the Chief of Manpower Management Service in a tenuous position. He must try to meet the staffing needs of the various services through the constant juggling of limited manpower resources.

The proposed recommendation, which would significantly improve manpower planning and allow for the effective distribution of limited resources, would be to require the submission of requests for additional enlisted billets to the Position Management Review Committee. This policy would require that additional enlisted staffing needs be adequately justified and documented by the chief of service. These needs would be reviewed by the Committee and could either be approved or disapproved locally based on available resources, or be forwarded to the Bureau of Medicine and Surgery as a change to the Center's current manpower authorization. This policy would preclude the indescriminate reassignment of enlisted personnel, would promote manpower planning, and would contribute to the better use of scarce manpower resources.

## Footnotes

[1]Subsequent to the completion of the problem-solving project, Shore Requirements, Standards and Manpower Planning System (SHORSTAMPS) staffing recommendations were received from CDR Wm. King, MSC, USN, SHORSTAMPS Project Officer, for the following Services:

1. Anesthesiology
2. Internal Medicine (includes all ten subspecialties)
3. Laboratory Medicine
4. Orthopedics (includes Physical and Occupational Therapy)
5. Pediatrics
6. Pharmacy
7. Radiology
8. Surgical Service (clinic only)

The staffing standards and formulae for these Services has been completed and has received preliminary approval from the Bureau of Medicine and Surgery. However, the SHORSTAMPS Project has not been completed which precludes Navy Department acceptance of these standards.

The staffing recommendations provided for these Services were based upon current workload data for the Medical Center and yielded staffing levels for the current facility. Compared against current authorized and on board strengths, the SHORSTAMPS staffing recommendations were generally much higher for all Services. The only Service which did not compare favorably was Laboratory Medicine. The SHORSTAMPS methodology does not recognize the College of American Pathologists work unit methodology, and there, the SHORSTAMPS recommendations were lower for enlisted and civil service technical staffing levels. Generally, the SHORSTAMPS recommendations far exceeded the current authorized strengths (especially in relation to physicians) and, in 50 percent of the Services, exceeded the on board strengths while matching the remaining Services one-for-one.

While the SHORSTAMPS data and recommendations do not consider the replacement hospital factors and, hence, the staffing requirements identified in the final document, the findings do tend to support the conclusion that the current staffing levels are inadequate for the replacement facility. These findings, based upon the current facility, tend to support the staffing methodologies and justifications used in the preparation of the final staffing document.

# APPENDIX A

# MILITARY AND CIVILIAN MANPOWER UTILIZATION REPORTS

DATE: 10 JAN 80

| SERVICE | OFFICER DESIG | OFFICER ALW | OFFICER ON BRD | ENLISTED NEC | ENLISTED ALW | ENLISTED NMP | ENLISTED ON BRD |
|---|---|---|---|---|---|---|---|
| Anesthesiology | 2100 | 4 | 12 | HM 0000 | 2 | 2 | 4 |
| ARS | 2100 | 1 | 1 | HM 0000 | 0 | 0 | 2 |
| | 2300 | 1 | 1 | 9519 | 1 | 0 | 1 |
| | | | | 8485 | 11 | 10 | 1 |
| Cardio-Thoracic | 2100 | 2 | 3 | HM 8408 | 1 | 1 | 1 |
| Commanding Officer | 2100 | 3 | 2 | HM 0000 | 6 | 2 | 3 |
| Asst. to CO: | 2300 | 7 | 8 | 8479 | 0 | 0 | 1 |
| MCLO, Reg. Coor. Public Aff., DCS | | | | | | | |
| Comptroller | 2300 | 2 | 2 | HM 0000 | 1 | 0 | 0 |
| Dental | 2200 | 5 | 5 | DT 0000 | 8 | 9 | 9 |
| | | | | 8703 | 0 | 0 | 0 |
| Dermatology | 2100 | 3 | 4 | HM 0000 | 2 | 2 | 3 |
| | | | | 8495 | 3 | 2 | 4 |
| DAS | 2300 | 3 | 2 | HM 0000 | 1 | 1 | 2 |
| Food Service | 2300 | 5 | 5 | | | | |
| Grad. Med. Educ. | 2100 | 189 | 227 | | | | |
| General Surgery | 2100 | 4 | 9 | HM 0000 | 1 | 1 | 2 |
| | 2300 | 0 | 1 | 8483 | 36 | 36 | 37 |

| SERVICE | DESIG | ALW | ON BRD | NEC | ALW | NMP | ON BRD |
|---|---|---|---|---|---|---|---|
| Internal Medicine | 2100 | 15 | 30 | HM 0000 | 12 | 11 | 20 |
| | 2300 | 1 | 1 | 8408 | 12 | 9 | 9 |
| | | | | 8433 | 3 | 3 | 2 |
| | | | | 8541 | 5 | 5 | 2 |
| Laboratory | 2100 | 8 | 9 | HM 0000 | 7 | 5 | 6 |
| | 2300 | 10 | 12 | 8433 | 2 | 2 | 2 |
| | | | | 8501 | 6 | 6 | 6 |
| | | | | 8503 | 2 | 1 | 3 |
| | | | | 8506 | 65 | 50 | 49 |
| | | | | 8507 | 23 | 12 | 14 |
| Legal | 2500 | 2 | 2 | LN 0000 | 1 | 1 | 1 |
| Manpower Management | 2300 | 2 | 2 | HM 0000 | 6 | 4 | 5 |
| Misc. HM Training (UIC 32959) | | | | HM 0000 | 0 | 0 | 1 |
| | | | | 9502 | 4 | 4 | 2 |
| Neurology | 2100 | 5 | 6 | HM 0000 | 0 | 0 | 1 |
| | | | | 8454 | 5 | 5 | 4 |
| Neurosurgery | 2100 | 18 | 5 | HM 0000 | 0 | 0 | 1 |
| | | | | 8483 | 1 | 1 | 0 |
| Nursing | 2900 | 149 | 152 | HM 0000 | 207 | 228 | 243 |
| | 2300 | 1 | 1 | | | | |
| OB/GYN | 2100 | 4 | 7 | | | | |
| Occupational Env. Health | 2100 | 1 | 0 | HM 0000 | 0 | 0 | 1 |
| | 2300 | 1 | 1 | 8432 | 5 | 4 | 4 |

| SERVICE | DESIG | ALW | ON BRD | NEC | | ALW | NMP | ON BRD |
|---|---|---|---|---|---|---|---|---|
| Operating Mgmt. | 2300 | 1 | 1 | HM | 0000 | 19 | 14 | 17 |
| | | | | BM | | 1 | 1 | 1 |
| | | | | BT | | 1 | 2 | 3 |
| | | | | MA | | 2 | 2 | 3 |
| | | | | MM | | 1 | 1 | 2 |
| | | | | MS | | 9 | 8 | 13 |
| | | | | IM | | 0 | 0 | 1 |
| Opthalmology | 2100 | 3 | 4 | HM | 0000 | 0 | 0 | 4 |
| | 2300 | 6 | 8 | | 8444 | 11 | 4 | 3 |
| | | | | | 8445 | 7 | 1 | 1 |
| Orthopedics | 2100 | 4 | 7 | HM | 0000 | 1 | 1 | 6 |
| | 2300 | 8 | 9 | | 8466 | 9 | 7 | 7 |
| | | | | | 8489 | 9 | 4 | 2 |
| Otorhinolaryngology | 2100 | 2 | 5 | HM | 0000 | 0 | 0 | 2 |
| | 2300 | 0 | 1 | | 8446 | 11 | 5 | 12 |
| Outpatient | 2100 | 4 | 4 | HM | 0000 | 11 | 10 | 13 |
| | 2300 | 0 | 1 | | 8425 | 2 | 5 | 1 |
| | 7540 | 1 | 4 | | | | | |
| Patient Affairs | 2300 | 3 | 3 | HM | 0000 | 8 | 7 | 8 |
| | | | | | 8425 | 0 | 0 | 0 |
| | | | | | 8485 | 0 | 0 | 0 |
| | | | | | 8486 | 0 | 0 | 1 |
| Pediatrics | 2100 | 8 | 12 | | | | | |
| Pharmacy | 2300 | 11 | 12 | HM | 0000 | 2 | 2 | 4 |
| | | | | | 8482 | 28 | 22 | 19 |
| Plastic Surgery | 2100 | 2 | 2 | HM | 0000 | 1 | 1 | 1 |
| | | | | | 8483 | 0 | 0 | 1 |

| SERVICE | DESIG | ALW | ON BRD | NEC | ALW | NMP | ON BRD |
|---|---|---|---|---|---|---|---|
| Psychiatry | 2100 | 6 | 7 | HM 0000 | 1 | 1 | 1 |
| | 2300 | 7 | 13 | 8485 | 32 | 30 | 29 |
| Public Qtrs. (SG) | | | | MS 0000 | 1 | 1 | 1 |
| Public Works | 5100 | 2 | 2 | | | | |
| Radiation Safety | 2300 | 3 | 4 | HM 0000 | 3 | 1 | 0 |
| | | | | 8402 | 0 | 0 | 1 |
| | | | | 8407 | 5 | 3 | 4 |
| | | | | 8416 | 0 | 0 | 0 |
| | | | | 8452 | 1 | 1 | 1 |
| | | | | ET 0000 | 0 | 0 | 0 |
| Radiology | 2100 | 11 | 14 | HM 0000 | 2 | 2 | 2 |
| | 2300 | 4 | 4 | 8407 | 0 | 0 | 2 |
| | | | | 8416 | 9 | 9 | 6 |
| | | | | 8452 | 35 | 24 | 26 |
| Religious Act. | 4100 | 6 | 6 | HM 0000 | 0 | 0 | 0 |
| | | | | RPSN | 2 | 2 | 2 |
| Special Services | | | | HM 0000 | 0 | 0 | 3 |
| | | | | 8485 | 0 | 0 | 1 |
| | | | | BT 0000 | 1 | 1 | 2 |
| | | | | SN 0000 | 0 | 0 | 1 |
| Supply | 2300 | 3 | 2 | HM 0000 | 16 | 14 | 19 |
| | | | | 8402 | 1 | 1 | 0 |
| | | | | 8477 | 4 | 4 | 7 |
| | | | | 8478 | 13 | 11 | 6 |
| | | | | 8479 | 0 | 0 | 3 |
| | | | | 8483 | 1 | 1 | 2 |
| | | | | 8485 | 0 | 0 | 1 |
| Urology | 2100 | 3 | 3 | HM 0000 | 2 | 2 | 4 |
| | | | | 8485 | 0 | 0 | 1 |
| | | | | 8486 | 6 | 5 | 4 |
| | TOTAL: | 545 | 638 | | 707 | 627 | 700 |

| SERVICE | COST CENTER | AUTHORIZED EMPLOYEES CEILING | AUTHORIZED EMPLOYEES OVERHIRES | ON BOARD A PERMANENT | ON BOARD B TEMPORARY | ANTICIPATED C TENTATIVE SELECTIONS | ANTICIPATED D COMMITMENTS | E LOSSES | ON BOARD TOTAL A+B+C+D-E | CANDIDATES REFERRED FOR CONSIDERATION | OTHER RECRUIT ACTIONS UNDERWAY PERMANENT | OTHER RECRUIT ACTIONS UNDERWAY TEMPORARY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANESTHESIOLOGY | 180 | 2 | | 2 | | | | | 2 | | | |
| CIVILIAN PERSONNEL | 050 | 30 | | 26 | 2 | | 2 | | 30 | 4 | 4 | |
| COMPTROLLER | 020 | 43 | | 39 | 2 | | | | 41 | | 4 | 3 |
| DENTAL (ORAL SURGERY) | | 1 | | 1 | | | | 1 | 0 | | 1 | |
| DERMATOLOGY | 140 | 2 | | 2 | 1 | | | | 3 | | | |
| FOOD MANAGEMENT | 0F0 | 98 | | 98 | 3 | | | 3 | 98 | | 1 | 2 |
| INTERNAL MEDICINE | 130 | 14 | | 14 | | | | | 14 | | 1 | |
| LABORATORY | 210 | 54 | | 48 | | | | | 48 | 3 | 4 | |
| -LABIS | 36C | | | | | | | | | | | |
| LEGAL | 0L0 | 2 | | 2 | | | | | 2 | | | |
| MANPOWER MANAGEMENT | 040 | 4 | | 4 | | | | | 4 | | | |
| NAVAL REG MED CLINICS | 420 | 20 | | 19 | | | | | 19 | | | |
| NEUROLOGY | 1E0 | 2 | | 2 | | | | | 2 | | | |
| NEUROSURGERY | 160 | 1 | | 1 | | | | | 1 | | | |
| NURSING | 120 | 191 | | 178 | 3 | 5 | 2 | 3 | 185 | | | |
| OB & GYN | 130 | 3 | | 2 | | | | | 2 | | 1 | |
| OCCUPATIONAL HEALTH | 340 | 5 | | 4 | 1 | | | | 5 | | | |
| -PREVENTIVE MEDICINE | 330 | | | | | | | | | | | |
| OFFICE OF THE CO | 010 | 3 | | 4 | | | | | 4 | | | |
| -MCLO | | 7 | | 7 | | | 1 | | 8 | | 7 | |
| -R.H.C.C. | 010 | 1 | | 1 | | | | | 1 | | | |
| -DIR CLIN SVCS | 010 | 7 | | 6 | | | | | 6 | | 1 | |
| -EDUCATION/TRAINING | 310 | | | | | | | | | | | |
| -STITT LIBRARY | 111 | | | | | | | | | | | |
| -DIR ADMIN SVCS | 010 | 3 | | 3 | | | | | 3 | | | |
| -PUBLIC AFFAIRS | | 1 | | 1 | | | | | 1 | | | |
| -CIP | 380 | 8 | 1 | 7 | | | | | 7 | | 7 | |

| SERVICE | COST CENTER | AUTHORIZED EMPLOYEES CEILING | AUTHORIZED EMPLOYEES OVERHIRES | ON BOARD A PERMANENT | ON BOARD B TEMPORARY | CHANGES IN PROCESS OR ANTICIPATED C TENTATIVE SELECTIONS | CHANGES IN PROCESS OR ANTICIPATED D COMMITMENTS | CHANGES IN PROCESS OR ANTICIPATED E LOSSES | PROJECTED ON BOARD TOTAL A+B+C+D-E | CANDIDATES REFERRED FOR CONSIDERATION | OTHER RECRUIT ACTIONS UNDERWAY PERMANENT | OTHER RECRUIT ACTIONS UNDERWAY TEMPORARY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OPERATING MANAGEMENT | | 132 | | 116 | 42 | | 1 | | 159 | | 2 | 2 |
| -OF MGMT OFFICER | 090 | | | | | | | | | | | |
| -TELECOM OPS | 091 | | | | | | | | | | | |
| -OFFICE SERV | 092 | | | | | | | | | | | |
| -REPRODUCTION | | | | | | | | | | | | |
| -LAUNDRY | 093 | | | | | | | | | | | |
| -HOUSEKEEPING | 094 | | | | | | | | | | | |
| -SECURITY | 095 | | | | | | | | | | | |
| -FIRE DEPT | 096 | | | | | | | | | | | |
| -BOQ/BEQ | 097 | | | | | | | | | | | |
| LINEN MGMT | 098 | | | | | | | | | | | |
| OPHTHALMOLOGY | 1M0 | 2 | | 2 | | | | | 2 | | | |
| ORTHOPEDIC | 1A0 | 2 | | 2 | | | | | 2 | | | 1 |
| OTORHINOLARYNGOLOGY | 1G0 | 2 | | 2 | | | | | 2 | | | |
| OUTPATIENT | 1L0 | 31 | | 30 | | | | | 30 | | 2 | |
| -ADULT | 368 | 8 | 5 | 11 | | | | | 11 | | 1 | |
| -WILLIE OAK | 413 | 4 | | 4 | | | | | 4 | | | |
| PATIENT AFFAIRS | 080 | 38 | | 35 | 1 | | | 1 | 35 | | 2 | |
| PEDIATRIC | 1C0 | 2 | | 2 | | | | | 2 | | | |
| PHARMACY | 220 | 4 | | 3 | | | | | 3 | | 1 | |
| PLASTIC SURGERY | 190 | 3 | | 3 | | | | | 3 | | | |
| PSYCHIATRY | 1D0 | 10 | | 9 | | | | | 9 | | | |
| -ALCOHOL REHAB | 350 | | | | | | | | | | | |
| PUBLIC WORKS | | 193 | 10 | 179 | 13 | | 1 | 4 | 189 | | 15 | 3 |
| -NRF/NCA | 071 | | | | | | | | | | | |
| -TRANSPORTATION | 075 | | | | | | | | | | | |
| -OPERATIONS | 076 | | | | | | | | | | | |
| -UTILITIES | 077 | | | | | | | | | | | |
| RAD SAFETY | 240 | 3 | | 3 | | | | | 3 | | | |
| RADIOLOGY | 230 | 20 | | 20 | | | | | 20 | | 1 | |
| -NUCLEAR MED | 250 | | | | | | | | | | | |

| SERVICE | COST CENTER | AUTHORIZED EMPLOYEES CEILING | AUTHORIZED EMPLOYEES OVERHIRES | ON BOARD A PERMANENT | ON BOARD B TEMPORARY | CHANGES IN PROCESS OR ANTICIPATED C TENTATIVE SELECTIONS | CHANGES IN PROCESS OR ANTICIPATED D COMMITMENTS | CHANGES IN PROCESS OR ANTICIPATED E LOSSES | PROJECTED ON BOARD TOTAL A+B+C+D-E | CANDIDATES REFERRED FOR CONSIDERATION | OTHER RECRUIT ACTIONS UNDERWAY PERMANENT | OTHER RECRUIT ACTIONS UNDERWAY TEMPORARY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RELIGIOUS ACTIVITIES | ORO | 2 | | 1 | 1 | | | | 2 | | | |
| SOCIAL WORK | UPO | 9 | | 9 | | | | | 9 | | | |
| SPECIAL SERVICES | 080 | 5 | | 5 | | | | | 5 | | 1 | |
| SUPPLY | 030 | 66 | | 61 | 1 | | | 1 | 61 | | 7 | |
| SURGERY | 150 | 3 | | 3 | | | | | 3 | | | |
| THOR CARD SURGERY | 1N0 | 3 | | 3 | 1 | | | 1 | 3 | | | |
| UROLOGY | 170 | 2 | | 1 | 1 | | | | 2 | | | |
| TOTAL | | 1046 | | 975 | 72 | 5 | 7 | 14 | 1045 | | 53 | 11 |

APPENDIX B

STAFFING REQUIREMENTS LETTER
TO CHIEFS OF SERVICE

NATIONAL NAVAL MEDICAL CENTER

BETHESDA, MARYLAND 20014

IN REPLY REFER TO
NNMC:COOF:jmm
1300

From: Replacement Facility Staffing Project Officer
To:

Subj: Determination of Staffing Requirements for the Replacement Hospital Facility

Ref: (a) NNMC:CO2:pjc over 5420 ltr dtd 20 Nov 78
(b) NNMC:C63:tkm over 5420 ltr dtd 14 Aug 79

Encl: (1)

1. Reference (a) established an Ad Hoc Committee with the express purpose of developing the staffing requirements, military and civilian, for the replacement hospital. These requirements were determined and delivered to the command as a staffing package via reference (b).

2. However, after careful review of the entire staffing package, it was realized that many of the requirements submitted by various Clinical and Administrative Services lacked sufficient quantitative justification. The personnel resources of the Department of Defense, and more specifically the Bureau of Medicine and Surgery, have been under constant review in recent years necessitating a more thorough justification when additional resources are requested.

3. Therefore, in view of the need for more quantitative justification, I have been tasked with developing a revised staffing requirements package. In order that the results of this task may be meaningful and completed in a timely manner, your assistance is required.

4. Enclosure (1) is a copy of the summary of the staffing requirements for your service that was submitted by the Ad Hoc Committee via reference (b). It is requested that you review these requirements as they relate to the following topic areas:

a. Identification of the controlling factors of workload - the functions and tasks which determine the staffing requirements.

b. Identification of the quantitative factors which, when applied to the controlling factors of workload, justify the staffing requirements for your service - e.g., staffing formulae developed/published by professional organizations.

c. Identification of the unmet need - those services which should be delivered, but are not due to reduced staffing levels and other constraints (current facility).

NNMC:COOF:jmm
1300

Subj: Determination of Staffing Requirements for the Replacement Hospital Facility

d. Identification of those factors/variables associated with the replacement facility which will have an effect on staffing - e.g., additional services programs, equipment, physical facilities, etc.

5. It is the intent of this study to identify the current staffing needs as well as those for the replacement facility and support these needs with well developed justification. With this thought in mind, it is requested that your staff develop and provide the necessary workload and other quantitative data to adequately justify your requirements.

6. This memorandum will be followed up by a personal interview for the purpose of refining your data into a final form. You will be contacted during November in order to set up an interview date. Should you have any questions concerning this memorandum, or any other aspect of the staffing study, please feel free to contact me (x 50305). Your assistance in this matter is greatly appreciated.

D. R. GERVAIS
LT MSC USN

# APPENDIX C

## PRELIMINARY STAFFING REQUIREMENTS SUMMARY

cy → CO 2
105

NATIONAL NAVAL MEDICAL CENTER
BETHESDA, MARYLAND - 20014

IN REPLY REFER TO
NNMC:COOF:jmm
1300
13 February 1980

MEMORANDUM

From: Administrative Resident
To: Commanding Officer

Subj: Staffing Requirements for Replacement Facility

Encl: (1) Departmental Staffing Requirements

1. In reference to our conversation of 11 February, the enclosure is forwarded for your review and approval.

2. The services listed in the enclosure are those requesting additional staffing based on their proposed move to the replacement facility, or as a result of the opening of the facility (e.g. Public Works and Civilian Personnel). Those services involved in the retrofit project have been ommitted.

3. The staffing totals are the result of our previous meetings and your subsequent adjustments to initial requests. A review of the civil service figures will reveal that the total does not fall below the 165 ceiling. A review of your adjustments to the C/S requests indicates that the total was 243. A ceiling of 162 can be met by subtracting the CPD (CSSR) requirements for 81 additional personnel.

4. Subsequent to our last meeting, LT McCarthy and myself interviewed Food Service, Nursing Service and CPD (CSSR). The results of these interviews were mixed. Food Service reduced their requirements, primarily due to the movement of the NCI unit to the replacement facility. Nursing Service is reviewing their requirements and is coordinating their requirements with Food Service and CPD. However, LCDR Jones and LT Brodsky have readjusted their requirements (to account for leave and sick days) by 21 percent and now request a total of 129 personnel (+ 101 C/S). They feel a total of 129 personnel is the minimum necessary for the department to meet its intended mission; any reductions in personnel would only serve to reduce the department's ability to provide service.

5. LT McCarthy and I stand ready, at your convenience, to discuss these requirements in detail.

Respectfully,

D. R. GERVAIS
LT, MSC, USN

DEPARTMENTS WITH CHANGES
AS A RESULT OF MOVE TO REPLACEMENT
FACILITY

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 1. | CIVILIAN PERSONNEL | | | | |
| | Civil Service | 30 | 30 | 35 | + 5 |
| 2. | COMPTROLLER | | | | |
| | Staff Officers - 2300 | 3 | 2 | 3 | 0 |
| | Enlisted (HMCS - 0000) | 1 | 0 | 0 | - 1 |
| | Civil Service | 43 | 41 | 45 | + 2 |
| 3. | FOOD MANAGEMENT SERVICE | | | | |
| | Staff Officers - 2300 | 5 | 5 | 7 | + 2 |
| | (Food Service Managers-2300) | (2) | (2) | (2) | (0) |
| | (Dieticians-2300) | (3) | (3) | (5) | (+ 2) |
| | Civil Service | 98 | 98 | 119 | +21 |
| 4. | OPERATING MANAGEMENT | | | | |
| | Staff Officers - 2300 | 2 | 2 | 2 | 0 |
| | Enlisted - (HM) | 19 | 17 | 19 | 0 |
| | Civil Service | 132 | 159 | 147 | +15 |
| 5. | PATIENT AFFAIRS SERVICE | | | | |
| | Staff Officers - 2300 | 3 | 2 | 3 | 0 |
| | Enlisted | 9 | 8 | 9 | 0 |
| | Civil Service | 38 | 35 | 45 | + 7 |
| 6. | PUBLIC WORKS | | | | |
| | Staff Officers - 5100 | 2 | 2 | 2 | 0 |
| | Civil Service | 193 | 189 | 225 | +32 |
| 7. | SUPPLY SERVICE (Less CSSR) | | | | |
| | Staff Officers - 2300 | 3 | 3 | 3 | 0 |
| | Enlisted | 27 | 31 | 53 | +26 |
| | Civil Service | 65 | 60 | 65 | 0 |
| 8. | CENTRAL PROCESSING AND DISTRIBUTION DEPARTMENT (CSSR) | | | | |
| | Staff Officers - 2900 | 0 | 1 | 1 | + 1 |
| | Enlisted | 8 | 8 | 26 | +18 |
| | Civil Service | 1 | 4 | 82 | +81 |

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 9. | ANESTHESIOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 4 | 12 | 12 | + 8 |
| | Enlisted | 2 | 4 | 6 | + 4 |
| | Civil Service | 2 | 2 | 2 | 0 |
| 10. | CARDIO-THORACIC SURGERY | | | | |
| | Staff Officers - 2100 | 2 | 3 | 3 | + 1 |
| | Enlisted | 1 | 1 | 2 | + 1 |
| | Civil Service | 3 | 3 | 3 | 0 |
| 11. | DENTAL SERVICE | | | | |
| | Staff Officers - 2200 | 3 | 3 | 6 | + 3 |
| | Nurse Corps - 2900 | 0 | 1 | 1 | + 1 |
| | Enlisted | 8 | 5 | 20 | +12 |
| | Civil Service | 1 | 0 | 2 | + 1 |
| 12. | DERMATOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 3 | 4 | 6 | + 3 |
| | Enlisted | 5 | 5 | 7 | + 2 |
| | Civil Service | 2 | 3 | 2 | 0 |
| 13. | GENERAL SURGERY | | | | |
| | Staff Officers - 2100 | 4 | 9 | 10 | + 6 |
| | 2300 | 0 | 1 | 1 | + 1 |
| | Enlisted | 37 | 39 | 61 | +24 |
| | Civil Service | 3 | 3 | 3 | 0 |
| 14. | INTERNAL MEDICINE SERVICE | | | | |
| | Staff Officers - 2100 | 16 | 33 | 46 | +30 |
| | 2300 | 1 | 1 | 1 | 0 |
| | Enlisted | 32 | 33 | 42 | +10 |
| | Civil Service | 14 | 14 | 21 | + 7 |
| 15. | LABORATORY SERVICE | | | | |
| | Staff Officers - 2100 | 8 | 10 | 16 | + 8 |
| | 2300 | 10 | 9 | 20 | +10 |
| | Enlisted | 105 | 84 | 137 | +32 |
| | Civil Service | 54 | 48 | 65 | +11 |
| 16. | NEUROLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 5 | 6 | 8 | + 3 |
| | Enlisted | 5 | 4 | 5 | 0 |
| | Civil Service | 2 | 2 | 2 | 0 |

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 17. | NEUROSURGERY SERVICE | | | | |
| | Staff Officers - 2100 | 1 | 5 | 4 | + 3 |
| | Enlisted | 1 | 3 | 3 | + 2 |
| | Civil Service | 1 | 1 | 1 | 0 |
| 18. | NURSING SERVICE | | | | |
| | Staff Officers - 2900 | 152 | 154 | 324 | +172 |
| | 2300 | 1 | 1 | 1 | 0 |
| | Enlisted | 207 | 235 | 429 | +222 |
| | Civil Service | 191 | 185 | 200 | + 9 |
| 19. | OUTPATIENT SERVICE | | | | |
| | Staff Officers - 2100 | 5 | 3 | 5 | 0 |
| | 2300 | 0 | 1 | 1 | + 1 |
| | 7540 | 1 | 4 | 4 | + 3 |
| | Enlisted | 13 | 12 | 13 | 0 |
| | Civil Service | 43 | 45 | 70 | +27 |
| 20. | OBSTETRICS/GYNECOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 4 | 7 | 6 | + 2 |
| | Civil Service | 3 | 2 | 3 | 0 |
| 21. | ORTHOPEDIC SERVICE | | | | |
| | Staff Officers - 2100 | 2 | 7 | 8 | + 6 |
| | 2300 | 10 | 10 | 15 | + 5 |
| | Enlisted | 19 | 19 | 27 | + 8 |
| | Civil Service | 2 | 2 | 3 | + 1 |
| 22. | OTORHINOLARYNGOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 2 | 5 | 6 | + 4 |
| | 2300 | 0 | 1 | 1 | + 1 |
| | Enlisted | 11 | 14 | 14 | + 3 |
| | Civil Service | 2 | 2 | 2 | 0 |
| 23. | PEDIATRIC SERVICE | | | | |
| | Staff Officers - 2100 | 8 | 12 | 18 | +10 |
| | Civil Service | 2 | 2 | 2 | 0 |
| 24. | PHARMACY SERVICE | | | | |
| | Staff Officers - 2300 | 10 | 9 | 20 | +10 |
| | Enlisted | 30 | 22 | 32 | + 2 |
| | Civil Service | 4 | 3 | 4 | 0 |

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 25. | PLASTIC SURGERY SERVICE | | | | |
| | Staff Officers - 2100 | 2 | 2 | 2 | 0 |
| | Enlisted | 1 | 2 | 2 | + 1 |
| | Civil Service | 3 | 3 | 3 | 0 |
| 26. | RADIOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 11 | 14 | 19 | + 8 |
| | 2300 | 4 | 4 | 5 | + 1 |
| | Enlisted | 45 | 37 | 74 | +29 |
| | Civil Service | 21 | 21 | 30 | + 9 |
| 27. | UROLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 3 | 4 | 3 | 0 |
| | Enlisted | 8 | 9 | 11 | + 3 |
| | Civil Service | 2 | 2 | 2 | 0 |
| 28. | SOCIAL SERVICE | | | | |
| | Civil Service | 9 | 9 | 19 | +10 |

SUMMARY TOTALS:

| | | | | |
|---|---|---|---|---|
| Staff Officers: | | | | |
| 2100 | 80 | 136 | 172 | + 92 |
| 2200 | 3 | 3 | 6 | + 3 |
| 2300 | 52 | 51 | 83 | + 31 |
| 2900 | 152 | 156 | 326 | +174 |
| 5100 | 2 | 2 | 2 | 0 |
| 7540 | 1 | 4 | 4 | + 3 |
| Enlisted: | 594 | 588 | 966 | +372 |
| Civil Service: | 964 | 978 | 1202 | +238 |
| TOTALS: | 1848 | 1918 | 2761 | +913 |

TOTAL Variance over Authorized Billets: 913 (49% increase)

TOTAL Variance over On Board Strength: 843 (44% increase)

# APPENDIX D

# ALTERNATIVE STAFFING PROPOSALS

NATIONAL NAVAL MEDICAL CENTER

BETHESDA, MARYLAND - 20014

IN REPLY REFER TO
NNMC:COOF:jmm
1300
3 March 1980

MEMORANDUM

From: Staffing Project Officer
To: Commanding Officer
Via: Director of Administrative Services

Subj: Staffing Requirements for the Replacement Facility

Ref: (a) Admin Resident Memo NNMC:COOF:jmm over 1300 of 13 February 1980

Encl: (1) Staffing Requirements for Departments with Changes as a Result of Move
(2) Alternative "A": Critical Services and Bring to Strength
(3) Alternative "C": Bring to Strength

1. Reference (a) provided the staffing requirements identified with the move to the replacement facility. That package, which included Nursing Service, identified the need for 913 additional billets and 843 additional personnel. These requirements were the end product of several previous meetings which had trimmed the original findings by 232 billets (13 enlisted, 219 civil service). In as much as Nursing Service is still working on their staffing needs, enclosure (1) is submitted as a final draft of the staffing requirements for those services who will be affected by the move to the replacement facility. It is pointed out that the final figure for Civil Service is 256 ceiling points. This figure includes the earlier ceiling set at 165 plus 81 billets for Central Materials Management and 13 billets for the Security Department.

2. It is strongly suggested that the final draft (Enclosure (1)) be sent to BUMED in order that the Center's staffing needs be made a matter of record. However, in view of the magnitude of the numbers created, it is suggested that the following alternatives be considered.

ALTERNATIVE "A": Total staffing of "critical" services and realignment of authorized billets to reflect on-board strength for the remaining services

This alternative (see enclosure(2)) recognizes the current manpower shortage being experienced throughout the Navy Medical Department as well as BUMED's inability to provide sufficient personnel and billets to satisfy the staffing requirements identified in the initial package. This alternative presents staffing proposals in the form of two parts, which may be more realistic for the short run.

Part One proposes to staff those services/departments identified as "critical" in the move to the replacement facility. The label "critical" is applied to those services/departments who will experience the greatest

NNMC:COOF:jmm
1300
3 March 1980

MEMORANDUM

Subj: Staffing Requirements for the Replacement Facility

impact with the move in the form of either the expansion of current services, the implementation of new missions, or both. These services/departments have been identified as follows:

a. Central Materials Management
b. Food Management
c. Operating Management (Security)
d. Patient Affairs
e. General Surgery
f. Laboratory
g. Orthopedics
h. Pharmacy
i. Radiology

Part Two of this alternative proposes the realignment of authorized billets to reflect current on-board strengths of the remaining services/departments. The adjustment of authorized billets to on-board strengths will produce a manpower document which is up to date and in keeping with current output performance levels.

The staffing requirements presented are in keeping with previous adjustments and reflect the staff required to meet the additional responsibilities placed upon these services. The failure to adequately staff these critical services will reduce their ability to provide service and produce a "ripple effect" throughout the facility. This ripple effect will be felt by all services who receive support from these "critical" services/departments and will ultimately reduce the Center's ability to provide total tertiary level health care services.

The "bottom line" associated with this alternative is presented in enclosure (2). The result is as follows:

a. A total increase of 408 billets
b. A total increase of 339 personnel

These requirements are based on the following changes in mission:

a. A total central materials management concept
b. A food management service system which relieves Nursing Service personnel of dietary responsibilities
c. The addition of a JCAH required Utilization Review Program
d. The strengthening of the Inpatient Word Processing and Admission Systems to reduce current backlogs and inefficiencies
e. The development of an adequate Security Department

NNMC:COOF:jmm
1300
3 March 1980

MEMORANDUM

Subj: Staffing Requirements for the Replacement Facility

f. An increase in Main Operating Suites, outpatient surgical treatment facilities, and ICU facilities
g. The elimination of open wards
h. The drastic reduction in supply spaces in all areas of the hospital necessitating an exchange cart system for medical supplies and linen
i. An increase of almost 100 percent in the Radiology Department equipment and spaces.

ALTERNATIVE "B": Total Staffing of Critical Services

This alternative addresses only those services/departments that were identified as "critical" services in Alternative "A". This alternative is viewed as a "stop-gap" measure and a further compromise in view of limited manpower resources.

Part A of enclosure (2) presents the total staffing requirements for this alternative which results in a request for:

a. A total increase of 343 billets
b. A total increase of 339 personnel

However, the only real compromise is a reduction of 65 billets over Alternative A; the additional personnel requirement remains the same.

In view of the need to bring the Center's Manpower Authorization up to date in order to reflect staffing needs against output, it would seem that this alternative serves no useful purpose. Furthermore, leaving the remaining services with a disparity between authorized allowance and on-board strength would seem to leave Management open to criticism.

ALTERNATIVE "C": Realignment of authorized allowance to reflect on-board strength and staffing authorized, unfilled billets

This alternative addresses only those services with unfilled billets and/or personnel strengths above authorized allowances. The staffing requirements for each service are outlined in enclosure (3) and provide the following results:

a. A total increase of 114 billets
b. A total increase of 78 personnel

The only services who would benefit by this proposal would be the Pharmacy, Laboratory, and to some extent, Radiology. The benefit would

NNMC:COOF:jmm
1300
3 March 1980

MEMORANDUM

Subj: Staffing Requirements for the Replacement Facility

be the staffing of billets that have been empty for some time. However, this proposal fails to address the needs of the "critical" services as a result of the increase in their mission requirements. Furthermore, this proposal completely ignores the Central Materials Management Service which will assume an entirely new and expanded role within the new facility.

3. In summary, three proposals have been presented as alternatives to the basic package. In view of current manpower shortages, it is strongly recommended that Alternative "A" (Total staffing of "critical" services while bringing remainder up to strength) be considered as the most viable proposal. However, regardless of which proposal is submitted, the new Central Materials Management Service cannot be overlooked. The design and construction of the new facility has made most of the services extremely dependent upon the CMMS. The Main Operating Room, Delivery Room, and all inpatient nursing care areas, including Special Care areas, must receive the majority of their support from this service. Furthermore, much of the supply storage space has been removed from the various outpatient clinic areas. It is imperative that this service receive the necessary staffing requirements if the hospital is to function effectively.

D. R. GERVAIS

STAFFING REQUIREMENTS FOR
DEPARTMENTS WITH CHANGES
AS A RESULT OF MOVE TO REPLACEMENT
FACILITY

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 1. | CIVILIAN PERSONNEL | | | | |
| | Civil Service | 30 | 30 | 35 | + 5 |
| 2. | COMPTROLLER | | | | |
| | Staff Officers - 2300 | 3 | 2 | 3 | - |
| | Enlisted (HMCS - 0000) | 1 | - | - | - 1 |
| | Civil Service | 43 | 41 | 45 | + 2 |
| 3. | FOOD MANAGEMENT SERVICE | | | | |
| | Staff Officers - 2300 | 5 | 5 | 7 | + 2 |
| | (Food Service Managers - 2300) | (2) | (2) | (2) | (-) |
| | (Dieticians - 2300) | (3) | (3) | (5) | (+ 2) |
| | Civil Service | 98 | 98 | 119 | +21 |
| 4. | OPERATING MANAGEMENT | | | | |
| | Staff Officers - 2300 | 2 | 2 | 2 | - |
| | Enlisted (HM) | 19 | 17 | 19 | - |
| | Civil Service | 132 | 159 | 174 | +42 |
| 5. | PATIENT AFFAIRS SERVICE | | | | |
| | Staff Officers - 2300 | 3 | 2 | 3 | - |
| | Enlisted | 9 | 8 | 9 | - |
| | Civil Service | 38 | 35 | 45 | + 7 |
| 6. | PUBLIC WORKS | | | | |
| | Staff Officers - 5100 | 2 | 2 | 2 | - |
| | Civil Service | 193 | 189 | 225 | +32 |
| 7. | SUPPLY SERVICE (Less CSSR) | | | | |
| | Staff Officers - 2300 | 3 | 3 | 3 | - |
| | Enlisted | 27 | 31 | 53 | +26 |
| | Civil Service | 65 | 60 | 65 | - |

Enclosure (1)

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 8. | CENTRAL PROCESSING AND DISTRIBUTION DEPARTMENT (CSSR) | | | | |
| | Staff Officers - 2900 | - | 1 | 1 | + 1 |
| | Enlisted | 8 | 8 | 26 | +18 |
| | Civil Service | 1 | 4 | 82 | +81 |
| 9. | ANESTHESIOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 4 | 12 | 12 | + 8 |
| | Enlisted | 2 | 4 | 6 | + 4 |
| | Civil Service | 2 | 2 | 2 | - |
| 10. | CARDIO-THORACIC SURGERY | | | | |
| | Staff Officers - 2100 | 2 | 3 | 3 | + 1 |
| | Enlisted | 1 | 1 | 2 | + 1 |
| | Civil Service | 3 | 3 | 3 | - |
| 11. | DENTAL SERVICE | | | | |
| | Staff Officers - 2200 | 3 | 3 | 6 | + 3 |
| | Nurse Corps - 2900 | - | 1 | 1 | + 1 |
| | Enlisted | 8 | 5 | 20 | +12 |
| | Civil Service | 1 | - | 2 | + 1 |
| 12. | DERMATOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 3 | 4 | 6 | + 3 |
| | Enlisted | 5 | 5 | 7 | + 2 |
| | Civil Service | 2 | 3 | 2 | - |
| 13. | GENERAL SURGERY | | | | |
| | Staff Officers - 2100 | 4 | 9 | 10 | + 6 |
| | 2300 | - | 1 | 1 | + 1 |
| | Enlisted | 37 | 39 | 61 | +24 |
| | Civil Service | 3 | 3 | 3 | - |
| 14. | INTERNAL MEDICINE SERVICE | | | | |
| | Staff Officers - 2100 | 16 | 33 | 46 | +30 |
| | 2300 | 1 | 1 | 1 | - |
| | Enlisted | 32 | 33 | 42 | +10 |
| | Civil Service | 14 | 14 | 21 | + 7 |
| 15. | LABORATORY SERVICE | | | | |
| | Staff Officers - 2100 | 8 | 10 | 16 | + 8 |
| | 2300 | 10 | 9 | 20 | +10 |
| | Enlisted | 105 | 84 | 137 | +32 |
| | Civil Service | 54 | 48 | 65 | +11 |

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 16. | NEUROLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 5 | 6 | 8 | + 3 |
| | Enlisted | 5 | 4 | 5 | - |
| | Civil Service | 2 | 2 | 2 | - |
| 17. | NEUROSURGERY SERVICE | | | | |
| | Staff Officers - 2100 | 1 | 5 | 4 | + 3 |
| | Enlisted | 1 | 3 | 3 | + 2 |
| | Civil Service | 1 | 1 | 1 | - |
| 18. | OUTPATIENT SERVICE | | | | |
| | Staff Officers - 2100 | 5 | 3 | 5 | - |
| | 2300 | - | 1 | 1 | + 1 |
| | 7540 | 1 | 4 | 4 | + 3 |
| | Enlisted | 13 | 12 | 13 | - |
| | Civil Service | 43 | 45 | 70 | +27 |
| 19. | OBSTETRICS/GYNECOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 4 | 7 | 6 | + 2 |
| | Civil Service | 3 | 2 | 3 | - |
| 20. | ORTHOPEDIC SERVICE | | | | |
| | Staff Officers - 2100 | 2 | 7 | 8 | + 6 |
| | 2300 | 10 | 10 | 15 | + 5 |
| | Enlisted | 19 | 15 | 27 | + 8 |
| | Civil Service | 2 | 2 | 3 | + 1 |
| 21. | OTORHINOLARYNGOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 2 | 5 | 6 | + 4 |
| | 2300 | - | 1 | 1 | + 1 |
| | Enlisted | 11 | 14 | 14 | + 3 |
| | Civil Service | 2 | 2 | 2 | - |
| 22. | PEDIATRIC SERVICE | | | | |
| | Staff Officers - 2100 | 8 | 12 | 18 | +10 |
| | Civil Service | 2 | 2 | 2 | - |
| 23. | PHARMACY SERVICE | | | | |
| | Staff Officers - 2300 | 10 | 9 | 20 | +10 |
| | Enlisted | 30 | 22 | 32 | + 2 |
| | Civil Service | 4 | 3 | 4 | - |

| | Service | Authorized | On Board | Requested | Variance |
|---|---|---|---|---|---|
| 24. | PLASTIC SURGERY SERVICE | | | | |
| | Staff Officers - 2100 | 2 | 2 | 2 | - |
| | Enlisted | 1 | 2 | 2 | + 1 |
| | Civil Service | 3 | 3 | 3 | - |
| 25. | RADIOLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 11 | 14 | 19 | + 8 |
| | 2300 | 4 | 4 | 5 | + 1 |
| | Enlisted | 45 | 37 | 74 | +29 |
| | Civil Service | 21 | 21 | 30 | + 9 |
| 26. | UROLOGY SERVICE | | | | |
| | Staff Officers - 2100 | 3 | 4 | 3 | - |
| | Enlisted | 8 | 9 | 11 | + 3 |
| | Civil Service | 2 | 2 | 2 | - |
| 27. | SOCIAL SERVICE | | | | |
| | Civil Service | 9 | 9 | 19 | +10 |
| | TOTAL STAFFING REQUIREMENTS: | | | | |
| | Staff Officers - 2100 | 80 | 136 | 172 | +92 |
| | 2200 | 3 | 3 | 6 | + 3 |
| | 2300 | 51 | 50 | 82 | +31 |
| | 2900 | - | 2 | 2 | + 2 |
| | 5100 | 2 | 2 | 2 | - |
| | 7540 | 1 | 4 | 4 | + 3 |
| | Enlisted | 387 | 353 | 563 | +176 |
| | Civil Service | 773 | 793 | 1029 | +256 |
| | SUMMARY TOTALS: | 1297 | 1343 | 1860 | +563 |

TOTAL Additional Billets: 563 (43.4% increase)

TOTAL Additional Personnel: 517 (38.5% increase)

Enclosure (1)

ALTERNATIVE "A"

STAFFING REQUIREMENTS

A. INCREASE FOR CRITICAL SERVICES

| Service | Authorized | On Board | Requested | Billet Increases | Personnel Increases |
|---|---|---|---|---|---|
| 1. FOOD MANAGEMENT SERVICE | | | | | |
| Staff Officers (2300) | 5 | 5 | 7 | + 2 | + 2 |
| (Food Service Managers-2300) | (2) | (2) | (2) | - | - |
| (Dieticians - 2300) | (3) | (3) | (5) | (+ 2) | (+ 2) |
| Civil Service | 98 | 98 | 119 | +21 | +21 |
| 2. PATIENT AFFAIRS SERVICE | | | | | |
| Staff Officers (2300) | 3 | 2 | 3 | - | + 1 |
| Enlisted | 9 | 8 | 9 | - | + 1 |
| Civil Service | 38 | 35 | 45 | + 7 | +10 |
| 3. OPERATING MANAGEMENT SERVICE | | | | | |
| Staff Officers (2300) | 2 | 2 | 2 | - | - |
| Enlisted (HM) | 19 | 17 | 19 | - | + 2 |
| Civil Service | 132 | 159 | 174 | +42 | +15 |
| 4. CENTRAL MATERIALS MANAGEMENT SERVICE | | | | | |
| Staff Officers (2900) | - | 1 | 1 | + 1 | - |
| Enlisted | 8 | 8 | 26 | +18 | +18 |
| Civil Service | 1 | 4 | 82 | +81 | +78 |
| 5. GENERAL SURGERY SERVICE | | | | | |
| Staff Officers (2100) | 4 | 9 | 10 | + 6 | + 1 |
| (2300) | - | 1 | 1 | + 1 | - |
| Enlisted | 37 | 39 | 61 | +24 | +22 |
| Civil Service | 3 | 3 | 3 | - | - |
| 6. LABORATORY SERVICE | | | | | |
| Staff Officers (2100) | 8 | 10 | 16 | + 8 | + 6 |
| (2300) | 10 | 9 | 20 | +10 | +11 |
| Enlisted | 105 | 84 | 137 | +32 | +53 |
| Civil Service | 54 | 48 | 65 | +11 | +17 |

ALTERNATIVE "A"

STAFFING REQUIREMENTS

| Service | Authorized | On Board | Requested | Billet Increases | Personnel Increases |
|---|---|---|---|---|---|
| 7. PHARMACY SERVICE | | | | | |
| Staff Officers (2300) | 10 | 9 | 20 | +10 | +11 |
| Enlisted | 30 | 22 | 32 | + 2 | +10 |
| Civil Service | 4 | 3 | 4 | - | + 1 |
| 8. RADIOLOGY SERVICE | | | | | |
| Staff Officers (2100) | 11 | 14 | 19 | + 8 | + 5 |
| (2300) | 4 | 4 | 5 | + 1 | + 1 |
| Enlisted | 45 | 37 | 74 | +29 | +37 |
| Civil Service | 21 | 21 | 30 | + 9 | + 9 |
| 9. ORTHOPEDIC SERVICE | | | | | |
| Staff Officers (2100) | 2 | 7 | 8 | + 6 | + 1 |
| (2300) | 10 | 10 | 15 | + 5 | + 5 |
| Enlisted | 19 | 15 | 27 | + 8 | +12 |
| Civil Service | 2 | 2 | 3 | + 1 | + 1 |
| TOTAL REQUIREMENTS FOR CRITICAL SERVICES: | | | | | |
| Staff Officers (2100) | 25 | 40 | 53 | +28 | +13 |
| (2300) | 44 | 42 | 73 | +29 | +31 |
| (2900) | - | 1 | 1 | + 1 | - |
| Enlisted | 272 | 230 | 385 | +113 | +155 |
| Civil Service | 353 | 373 | 525 | +172 | +140 |
| | 694 | 686 | 1037 | +343 | +339 |

ALTERNATIVE "A"

STAFFING REQUIREMENTS

B. INCREASE AUTHORIZED BILLETS TO ON BOARD STRENGTH

| Service | Authorized | On Board | Billet Increase |
|---|---|---|---|
| 1. SUPPLY SERVICE | | | |
| Enlisted | 27 | 31 | + 4 |
| 2. ANESTHESIOLOGY SERVICE | | | |
| Staff Officers (2100) | 4 | 12 | + 8 |
| Enlisted | 2 | 4 | + 2 |
| 3. CARDIO-THORACIC SURGERY | | | |
| Staff Officers (2100) | 2 | 3 | + 1 |
| 4. DERMATOLOGY SERVICE | | | |
| Staff Officers (2100) | 3 | 4 | + 1 |
| Civil Service | 2 | 3 | + 1 |
| 5. INTERNAL MEDICINE | | | |
| Staff Officers (2100) | 16 | 33 | +17 |
| Enlisted | 32 | 33 | + 1 |
| 6. NEUROLOGY SERVICE | | | |
| Staff Officers (2100) | 5 | 6 | + 1 |
| 7. NEUROSURGERY SERVICE | | | |
| Staff Officers (2100) | 1 | 5 | + 4 |
| Enlisted | 1 | 3 | + 2 |
| 8. OUTPATIENT SERVICE | | | |
| Staff Officers (2300) | - | 1 | + 1 |
| (7540) | 1 | 4 | + 3 |
| Civil Service | 43 | 45 | + 2 |

ALTERNATIVE "A"

STAFFING REQUIREMENTS

B. INCREASE AUTHORIZED BILLETS TO ON BOARD STRENGTH

| Service | Authorized | On Board | Billet Increase |
|---|---|---|---|
| 9. OBSTETRICS/GYNECOLOGY SERVICE | | | |
| Staff Officers (2100) | 4 | 7 | + 3 |
| 10. OTORHINOLARYNGOLOGY SERVICE | | | |
| Staff Officers (2100) | 2 | 5 | + 3 |
| (2300) | - | 1 | + 1 |
| Enlisted | 11 | 14 | + 3 |
| 11. PEDIATRICS SERVICE | | | |
| Staff Officers (2100) | 8 | 12 | + 4 |
| 12. PLASTIC SURGERY SERVICE | | | |
| Enlisted | 1 | 2 | + 1 |
| 13. UROLOGY SERVICE | | | |
| Staff Officers (2100) | 3 | 4 | + 1 |
| Enlisted | 8 | 9 | + 1 |
| TOTAL REQUIREMENTS TO BRING TO STRENGTH | | | |
| Staff Officers (2100) | 48 | 91 | +43 |
| (2300) | - | 2 | + 2 |
| (7540) | 1 | 4 | + 3 |
| Enlisted | 82 | 96 | +14 |
| Civil Service | 45 | 48 | + 3 |
| | 176 | 241 | +65 |

ALTERNATIVE "A"

STAFFING REQUIREMENTS

TOTAL REQUIREMENTS ALTERNATIVE B. (ADDITIONAL BILLETS)

| | | | |
|---|---|---|---|
| Staff Officers | | 106 | |
| | (2100) | (71) | |
| | (2300) | (31) | |
| | (2900) | (1) | |
| | (7540) | (3) | |
| Enlisted | | 127 | |
| Civil Service | | 175 | |
| | | 408 | Total Billets Required |
| | | 339 | Total Personnel Required |

ALTERNATIVE "C"

BRING SERVICES TO STRENGTH AND

STAFF UNFILLED BILLETS

| Service | Authorized | On Board | Additional Billets | Additional Personnel |
|---|---|---|---|---|
| 1. COMPTROLLER | | | | |
| Staff Officers (2300) | 3 | 2 | - | + 1 |
| Enlisted (HMCS - 0000) | 1 | - | - | - |
| Civil Service | 43 | 41 | - | + 2 |
| 2. OPERATING MANAGEMENT | | | | |
| Staff Officers (2300) | 2 | 2 | - | - |
| Enlisted (HM) | 19 | 17 | - | + 2 |
| Civil Service | 132 | 159 | +27 | - |
| 3. PATIENT AFFAIRS SERVICE | | | | |
| Staff Officers (2300) | 3 | 2 | - | + 1 |
| Enlisted | 9 | 8 | - | + 1 |
| Civil Service | 38 | 35 | - | + 3 |
| 4. PUBLIC WORKS | | | | |
| Staff Officers (5100) | 2 | 2 | - | - |
| Civil Service | 193 | 189 | - | + 4 |
| 5. SUPPLY SERVICE (Less CSSR) | | | | |
| Staff Officers (2300) | 3 | 3 | - | - |
| Enlisted | 27 | 31 | + 4 | - |
| Civil Service | 65 | 60 | - | + 5 |
| 6. CENTRAL PROCESSING AND DISTRIBUTION DEPARTMENT (CSSR) | | | | |
| Staff Officers (2900) | - | 1 | + 1 | - |
| Enlisted | 8 | 8 | - | - |
| Civil Service | 1 | 4 | + 3 | - |
| 7. ANESTHESIOLOGY SERVICE | | | | |
| Staff Officers (2100) | 4 | 12 | + 8 | - |
| Enlisted | 2 | 4 | + 2 | - |
| Civil Service | 2 | 2 | - | - |

ALTERNATIVE "C"

BRING SERVICES TO STRENGTH AND

STAFF UNFILLED BILLETS

| | Service | Authorized | On Board | Additional Billets | Additional Personnel |
|---|---|---|---|---|---|
| 8. | CARDIO-THORACIC SURGERY | | | | |
| | Staff Officers (2100) | 2 | 3 | + 1 | - |
| | Enlisted | 1 | 1 | - | - |
| | Civil Service | 3 | 3 | - | - |
| 9. | DENTAL SERVICE | | | | |
| | Staff Officers (2200) | 3 | 3 | - | - |
| | Nurse Corps (2900) | 0 | 1 | + 1 | - |
| | Enlisted | 8 | 5 | - | + 3 |
| | Civil Service | 1 | 0 | - | + 1 |
| 10. | DERMATOLOGY SERVICE | | | | |
| | Staff Officers (2100) | 3 | 4 | + 1 | - |
| | Enlisted | 5 | 5 | - | - |
| | Civil Service | 2 | 3 | + 1 | - |
| 11. | GENERAL SURGERY | | | | |
| | Staff Officers (2100) | 4 | 9 | + 5 | - |
| | (2300) | - | 1 | + 1 | - |
| | Enlisted | 37 | 39 | + 2 | - |
| | Civil Service | 3 | 3 | - | - |
| 12. | INTERNAL MEDICINE SERVICE | | | | |
| | Staff Officers (2100) | 16 | 33 | +17 | - |
| | (2300) | 1 | 1 | - | - |
| | Enlisted | 32 | 33 | + 1 | - |
| | Civil Service | 14 | 14 | - | - |
| 13. | LABORATORY SERVICE | | | | |
| | Staff Officers (2100) | 8 | 10 | + 2 | - |
| | (2300) | 10 | 9 | - | + 1 |
| | Enlisted | 105 | 84 | - | +21 |
| | Civil Service | 54 | 48 | - | + 6 |

ALTERNATIVE "C"

BRING SERVICES TO STRENGTH AND

STAFF UNFILLED BILLETS

| | Service | Authorized | On Board | Additional Billets | Additional Personnel |
|---|---|---|---|---|---|
| 14. | NEUROLOGY SERVICE | | | | |
| | Staff Officers (2100) | 5 | 6 | + 1 | - |
| | Enlisted | 5 | 4 | - | + 1 |
| | Civil Service | 2 | 2 | - | - |
| 15. | NEUROSURGERY SERVICE | | | | |
| | Staff Officers (2100) | 1 | 5 | + 4 | - |
| | Enlisted | 1 | 3 | + 2 | - |
| | Civil Service | 1 | 1 | - | - |
| 16. | OUTPATIENT SERVICE | | | | |
| | Staff Officers (2100) | 5 | 3 | - | + 2 |
| | (2300) | - | 1 | + 1 | - |
| | (7540) | 1 | 4 | + 3 | - |
| | Enlisted | 13 | 12 | - | + 1 |
| | Civil Service | 43 | 45 | + 2 | - |
| 17. | OBSTETRICS/GYNECOLOGY SERVICE | | | | |
| | Staff Officers (2100) | 4 | 7 | + 3 | - |
| | Civil Service | 3 | 2 | - | + 1 |
| 18. | ORTHOPEDIC SERVICE | | | | |
| | Staff Officers (2100) | 2 | 7 | + 5 | - |
| | (2300) | 10 | 10 | - | - |
| | Enlisted | 19 | 15 | - | + 4 |
| | Civil Service | 2 | 2 | - | - |
| 19. | OTORHINOLARYNGOLOGY SERVICE | | | | |
| | Staff Officers (2100) | 2 | 5 | + 3 | - |
| | (2300) | - | 1 | + 1 | - |
| | Enlisted | 11 | 14 | + 3 | - |
| | Civil Service | 2 | 2 | - | - |

ALTERNATIVE "C"

BRING SERVICES TO STRENGTH AND

STAFF UNFILLED BILLETS

| | Service | Authorized | On Board | Additional Billets | Additional Personnel |
|---|---|---|---|---|---|
| 20. | PEDIATRIC SERVICE | | | | |
| | Staff Officers (2100) | 8 | 12 | + 4 | - |
| | Civil Service | 2 | 2 | - | - |
| 21. | PHARMACY SERVICE | | | | |
| | Staff Officers (2300) | 10 | 9 | - | + 1 |
| | Enlisted | 30 | 22 | - | + 8 |
| | Civil Service | 4 | 3 | - | + 1 |
| 22. | PLASTIC SURGERY SERVICE | | | | |
| | Staff Officers (2100) | 2 | 2 | - | - |
| | Enlisted | 1 | 2 | + 1 | - |
| | Civil Service | 3 | 3 | - | - |
| 23. | RADIOLOGY SERVICE | | | | |
| | Staff Officers (2100) | 11 | 14 | + 3 | - |
| | (2300) | 4 | 4 | - | - |
| | Enlisted | 45 | 37 | - | + 8 |
| | Civil Service | 21 | 21 | - | - |
| 24. | UROLOGY SERVICE | | | | |
| | Staff Officers (2100) | 3 | 4 | + 1 | - |
| | Enlisted | 8 | 9 | + 1 | - |
| | Civil Service | 2 | 2 | - | - |

ALTERNATIVE "C"

BRING SERVICES TO STRENGTH AND

STAFF UNFILLED BILLETS

| | Authorized | On Board | Additional Billets | Additional Personnel |
|---|---|---|---|---|
| | A | B | C | D |
| Staff Officers: | | | | |
| 2100 | 80 | 136 | +58 | + 2 |
| 2200 | 3 | 3 | - | - |
| 2300 | 46 | 45 | + 3 | + 4 |
| 2900 | - | 2 | + 2 | - |
| 5100 | 2 | 2 | - | - |
| 7540 | 1 | 4 | + 3 | - |
| Enlisted: | 379 | 345 | +15 | +49 |
| Civil Service: | 636 | 646 | +33 | +23 |
| Summary Totals (A+C=B+D) | 1147 | 1183 | +114 | +78 |

TOTAL Additional Billets: 114

TOTAL Additional Personnel: 78

# IMPACT SUMMARY RELATIVE TO LESS THAN MINIMUM STAFFING

The staffing requirements identified for the replacement hospital have addressed both optimum and minimum levels. The minimum levels are essential to the effective delivery of health care services. The following impact statements, developed from the various Service justifications, reflects some of the adverse effects that might be expected to result under less than minimum staffing.

## Civilian Personnel Service

- Severe limitation of services in the following functional areas:
  - Labor Relations
  - Employee Services (health benefits, life insurance, retirement, etc.)
  - Training, Education, and Development

## Food Management Service

- Inability to support non-ambulatory food services to nursing units remaining in existing facilities.
- Contractual support for dining room cleaning, common space housekeeping, heavy kitchen cleaning, and dishwashing and trash removal.
- Inability to fully staff all dining room servicing points.
- Severely jeopardize the ability to offer a cost effective, selective menu.

## Operating Management Service

- Contract security services for the replacement facility.
- Contract housekeeping services for much of the replacement facility.
- Fragmented control of audiovisual equipment for 10 major conference rooms.
- Lack of timeliness in mail delivery.

## Patient Affairs Service

- Use of contract services and overtime to deal with increased word processing workload.
- Increased backlog in routine narrative summaries and other reports.
- Retarded implementation of the Utilization Review Program.
- Increased backlog in response to inquiries from third parties for inpatient information.

Public Works Service

- Increased contracting for operations and maintenance services.
- Limited response by Public Works to emergency service calls.
- Contract preventive maintenance programs.
- Limited operation and capacity of the Central Building Automation System.

Supply Service - BMET's (Less CSSR)

- Inability to assume approximately $200,000.00 in existing service contracts.
- Contract maintenance and repair of the numerous microprocessors and other highly complex, technological electronic equipment.

Central Processing and Distribution Service (CMMS)

- Services would be limited to sterilization support for the Main Operating Room; limited supply and linen support to the inpatient units.
- No supply support to the clinics.
- Nursing service personnel would be required to handle the supply and linen carts on the inpatient units.
- All medical and non-medical supply functions would have to be performed by clinic health care personnel.

Anesthesiology Service

- Limitations in the amount of surgical procedures performed.
- Inability to provide training for nurse anesthetists and dental general practice residents.
- Severe limitations in the ability to provide consultative services in the fields of pain problems and drug detoxification.

Cardio-Thoracic Surgery Service

- Reduction in open-heart surgery cases.
- Termination of the Cardio-Thoracic Surgery training program and reduction of training to general surgery residents, interns and medical students.

# APPENDIX E

# NEGATIVE IMPACT SUMMARY

Dental Service

- Limitation of oral surgery, general and restorative dentistry services.
- Inability to implement the program in dental hygiene.
- Elimination of dedicated prosthetic laboratory support.

General Surgery Service

- Operation of eight (8) of the sixteen (16) operating rooms.
- Severe limitation in the use of the proctology and endoscopy rooms.
- Limited ability to perform minor surgical procedures within the Surgical Clinic.
- Adverse impact on this command's peripheral vascular surgeon.

Internal Medicine Service

- Inability to provide adequate physician support to an expanded Intensive Care Unit.
- Decreased physician training, particularly in the outpatient setting.
- Continued use of nurse and ancillary staff for clerical functions.
- Adverse impact on accreditation for the Service's Residency and Fellowship Programs.
- Inability to provide adequate patient education and support to the growing numbers of Hematology/Oncology patients.

Laboratory Medicine Service

- Trend analysis of current workload statistics against projected increases indicates that the capabilities of the present staff will be exceeded by Fiscal Year 1981.
- Decreased ability to provide efficient and timely support to region medical facilities within DOD Region 9.
- Increased requirements and costs for referral of laboratory studies to commercial reference laboratories.
- Decreased ability to meet the increasing demand for therapeutic drug monitoring and emergency and urgent testing by the Immediate Response Laboratory

Laboratory Medicine Service (continued)

- Delayed development and implementation of new programs such as micro-methods for pediatric patients.

- Inability to provide cytogenetic studies, histocompatability (HLA) testing, viral isolation and identification procedures, and the expansion of the Electron Microscopy Section.

Neurology Service

- Possible loss of EEG capability as well as training of EEG technicians.

- Possible compromise and loss of accreditation of the Neurology Training Program.

- An increase in the number of patients referred to CHAMPUS for electro-encephalography and electromyography procedures.

Neurosurgery Service

- Possible compromise and possible loss of accreditation of the Navy's sole Neurosurgery Training Program.

- Reduction in health care services to retired and dependents.

- Inadequate technical control and security for expensive, microsurgical instruments and complex technological equipment.

Outpatient Service

- Increased risk that medical records administration will become a major command deficiency in future JCAH Accreditation Surveys.

- Inability to develop and implement an Ambulatory Health Care Education Program.

- Increase in the use of overtime to meet the administrative demands placed upon the Central Appointment Desk and the Outpatient Medical Records File Room as well as the inability to provide after-hours service.

- Inability to meet the ever-increasing demand for response to correspondence initiated by third parties.

- Inability to develop and implement the Outpatient Word Processing Service.

Orthopedic Service

- Reduction in the care of dependent and retired patients.

- Possible compromise of the Orthopedic Training Program with possible jeopardy of continued accreditation.

- Severe impact on continued training for affiliated programs such as Howard University, University of Maryland, and the Tri-Service Physical Therapy Training Program at the Academy of Health Sciences, Fort Sam, Houston, Texas.

Pharmacy Service

- Adversely affect the ability to provide continued Unit Dose and I.V. Additive Services within the replacement facility.

- Adversely affect support of regional clinics regarding prepacks.

- Inability to implement the Hematology/Oncology Program in support of the National Cancer Institute's special care unit, the Drug Information and Patient Counseling Service, and the Clinical Pharmacy programs.

- Inability to operate a satellite pharmacy in support of the Special Care Units.

- Increase in outpatient pharmacy waiting time.

Radiology Service

- Diagnostic Radiology

  - Elimination of Urology Clinic support.
  - Excessive delays in Operating Room support.
  - Possible closure of two (2) radiographic and fluoroscopy rooms, one (1) chest room, two (2) tomographic rooms, one (1) head and neck room, and two (2) radiographic rooms.

- Imaging Branch

  - Limited use of the whole body counting facility.
  - Reduction of imaging capabilities and in-vitro support.

- Radiation Therapy

  - Limited use of 18 MEV LINAC.
  - Limited use of Orthovoltage Treatment Rooms.

- Increased film loss

Obstetrics and Gynecology Service

- Reduction in the complexity of care available.
- No expansion in services to meet existing demand.

# BIBLIOGRAPHY

# BIBLIOGRAPHY

"Air Force Manpower Determination Process; An Explanation of the System." A paper provided by Captain Daryl Eichoff, MSC, USAF, Office of the Surgeon General, Bowling Air Force Base, Washington, D. C.

Bureau of Medicine and Surgery. "Determination of Manpower Requirements and Manpower Planning." A briefing presented to the Navy Inspector General, Washington, D. C., 25 February, 1975. (Mimeographed.)

Dean, Charles R. "Staffing Patterns and Clinic Efficiency." Family Planning Perspective 2, No. 4 (October, 1970): 35-40.

Mourdorf, Bruce D. "Allocation of Resources for Ambulatory Care - A Staffing Model for Outpatient Clinics." Public Health Reports 90, No. 5 (September-October, 1975): 393-401.

Preparation of SHORSTAMPS Staffing Standards and Staffing Guide. Chief of Naval Operations Instruction 5310.4, 2 March 1979.

Richel, William, and Sajdn, Louis. "Performance Factor Developed as Surgical Suite Management Tool." Hospitals 51, No. 6 (March 16, 1977): 146-52.

Small, James E. "Monitoring Staffing and Productivity." Hospital Progress 56, No. 2 (February, 1975): 66-8, 72.

Staffing Guide for U.S. Army Medical Department Activities. Department of the Army Pamphlet 570-557, June 1974.